



SEQUENCE LISTING

#14
RECEIVED
AUG 15 2002
TECH CENTER 1600/2900

<110> Stefan Bauer
Grayson B. Lipford
Hermann Wagner

<120> PROCESS FOR HIGH THROUGHPUT SCREENING OF
CpG-BASED IMMUNO-AGONIST/ANTAGONIST

<130> C1041/7016 (AWS)

<140> US 09/954,987

<141> 2001-09-17

<150> US 60/233,035

<151> 2000-09-15

<150> US 60/263,657

<151> 2001-01-23

<150> US 60/291,726

<151> 2001-05-17

<150> US 60/300,210

<151> 2001-06-22

<160> 230

<170> FastSEQ for Windows Version 3.0

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<212> DNA

<213> Mus musculus

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<221> misc_feature

<222> (0)...(0)

<223> Murine TLR9 cDNA

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<212> DNA

<213> Mus musculus

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<222> (0)...(0)

<223> Murine TLR9 ORF

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<211> 1032

<212> PRT

<213> Homo sapiens

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 Pro Asp Ala His Arg Ser Arg Tyr Val Arg Leu Arg Gln Arg Leu Cys
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 35 40 45
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 50 55 60
 Gly Leu Tyr Leu His Phe Phe Gln Gly Leu Ser Gly Val Leu Lys Leu
 65 70 75 80
 Asp Leu Ser Gln Asn Asn Leu His Ile Leu Arg Pro Gln Asn Leu Asp
 85 90 95
 Asn Leu Pro Lys Ser Leu Lys Leu Leu Ser Leu Arg Asp Asn Tyr Leu
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 Ser Phe Phe Asn Trp Thr Ser Leu Ser Phe Leu Pro Asn Leu Glu Val
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 Leu Asp Leu Ala Gly Asn Gln Leu Lys Ala Leu Thr Asn Gly Thr Leu
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gctacggccc tgcagctggc cggggctgcc acacttcaca ccattagcca ggccaggcac 360
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 35 40 45
 Gln Leu Gln Gly Arg Ser Ile Phe Ala Gln Asp Leu Arg Leu Cys Leu
 50 55 60
 Asp Glu Val Leu Ser Trp Asp Cys Phe Gly Leu Ser Leu Leu Ala Val
 65 70 75 80
 Ala Val Gly Met Val Val Pro Ile Leu His His Leu Cys Gly Trp Asp
 85 90 95
 Val Trp Tyr Cys Phe His Leu Cys Leu Ala Trp Leu Pro Leu Leu Ala
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 <223> Synthetic oligonucleotide

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<p><210> 118 <211> 24 <212> DNA <213> Artificial Sequence</p>	
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<p><220> <223> Synthetic oligonucleotide</p>	
<p><400> 121 tgtcggtgtc gtt</p>	13

<210> 122
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 <220>
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 <400> 122
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 <210> 123
 <211> 25
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 <220>
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 <400> 123
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 <210> 124
 <211> 21
 <212> DNA
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 <220>
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 <400> 124
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 <210> 125
 <211> 31
 <212> PRT
 <213> Unknown

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 <222> (2) ... (8)
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 <222> (10) ... (10)
 <223>

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 <222> (12) ... (12)
 <223>

 <220>
 <221> UNSURE
 <222> (14) ... (22)
 <223>

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<221> UNSURE
 <222> (25)...(30)
 <223>

<400> 125
 Arg Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg Xaa Asp Xaa Tyr Xaa Xaa Xaa
 1 5 10 15
 Xaa Xaa Xaa Xaa Xaa Xaa Arg Ser Xaa Xaa Xaa Xaa Xaa Tyr
 20 25 30

<210> 126
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
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 <222> (2)...(8)
 <223>

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 <222> (10)...(10)
 <223>

<220>
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<220>
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 <222> (14)...(22)
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<220>
 <221> UNSURE
 <222> (25)...(30)
 <223>

<400> 126
 Gln Xaa Xaa Xaa Xaa Xaa Xaa Xaa Lys Xaa Asp Xaa Tyr Xaa Xaa Xaa
 1 5 10 15
 Xaa Xaa Xaa Xaa Xaa Xaa Arg Leu Xaa Xaa Xaa Xaa Xaa Tyr
 20 25 30

<210> 127
 <211> 31
 <212> PRT
 <213> Mus musculus

<220>
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 <222> (2)...(8)
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<220>
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 <222> (10)...(10)

<223>
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 <222> (12)...(12)
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 <222> (14)...(22)
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 <221> UNSURE
 <222> (25)...(30)
 <223>
 <400> 127
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 1 5 10 15
 Xaa Xaa Xaa Xaa Xaa Xaa Gln Leu Xaa Xaa Xaa Xaa Xaa Tyr
 20 25 30

<210> 128
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide

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 <223> m5c

<220>
 <221> modified_base
 <222> (5)...(5)
 <223> m5c

<220>
 <221> modified_base
 <222> (13)...(13)
 <223> m5c

<220>
 <221> modified_base
 <222> (21)...(21)
 <223> m5c

<400> 128
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24

<210> 129
 <211> 6
 <212> DNA
 <213> Artificial Sequence

<220>		
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<210>	131	
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<212>	DNA	
<213>	Artificial Sequence	
<220>		
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<210>	132	
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 <400> 140
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 <210> 141
 <211> 45
 <212> DNA
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 <220>
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 <400> 141
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 <210> 142
 <211> 45
 <212> DNA
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 <220>
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 <400> 142
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 <210> 143
 <211> 45
 <212> DNA
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 <220>
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 <400> 143
 ctgtatagaa tgtcctcgtc acttccccca gctgcaccct gagac 45

 <210> 144
 <211> 45
 <212> DNA
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 <220>
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 <400> 144
 gtctcagggt gcagctgggg gaagtgcga ggacattcta tacag 45

 <210> 145
 <211> 14
 <212> PRT
 <213> Artificial Sequence

 <220>

<223> Mutated from human

<220>

<221> UNSURE

<222> (2) ... (3)

<223>

<220>

<221> UNSURE

<222> (5) ... (10)

<223>

<220>

<221> UNSURE

<222> (12) ... (13)

<223>

<400> 145

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1			5						10				

<210> 146

<211> 20

<212> PRT

<213> Homo sapiens

<400> 146

Cys	Arg	Arg	Cys	Asp	His	Ala	Pro	Asn	Pro	Cys	Met	Glu	Cys	Pro	Arg
1			5						10					15	
His	Phe	Pro	Gln												
			20												

<210> 147

<211> 20

<212> PRT

<213> Unknown

<220>

<223> Mutated from human

<400> 147

Cys	Arg	Arg	Cys	Asp	His	Ala	Pro	Asn	Pro	Cys	Met	Glu	Cys	Gly	Gln
1			5						10					15	
Lys	Ser	Leu	His												
			20												

<210> 148

<211> 20

<212> PRT

<213> Mus musculus

<400> 148

Cys	Arg	Arg	Cys	Asp	His	Ala	Pro	Asn	Pro	Cys	Met	Ile	Cys	Gly	Gln
1			5						10					15	
Lys	Ser	Leu	His												
			20												

<210> 149

<211> 20

<212> PRT
 <213> Unknown

 <220>
 <223> Mutated from mouse

 <400> 149
 Cys Arg Arg Cys Asp His Ala Pro Asn Pro Cys Met Ile Cys Pro Arg
 1 5 10 15
 His Phe Pro Gln
 20

 <210> 150
 <211> 32
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide

 <400> 150
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 <210> 151
 <211> 32
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide

 <400> 151
 gagtgtctgt gggcgagggc cagcttattg tg 32

 <210> 152
 <211> 32
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide

 <400> 152
 cataacaaac tggccttggc ccactggaaa tc 32

 <210> 153
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 <220>
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 <400> 153
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 <210> 154
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<213> Artificial Sequence
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 <400> 154
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 <210> 155
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 <400> 155
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 <211> 30
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 <400> 156
 cgagattggc tgcattggca gacgctcttc 30
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 <400> 157
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 <210> 158
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 <400> 158
 ggcctcagca tcttt 15
 <210> 159
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<p><400> 159 ggcctatcga ttttt</p>	15
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<p><210> 161 <211> 15 <212> DNA <213> Artificial Sequence</p>	
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<p><210> 162 <211> 34 <212> DNA <213> Artificial Sequence</p>	
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<p><210> 163 <211> 34 <212> DNA <213> Artificial Sequence</p>	
<p><220> <223> Synthetic oligonucleotide</p>	
<p><400> 163 ggtcctgtgc aaaaatcgat aggccctgga gctg</p>	34
<p><210> 164 <211> 34 <212> DNA <213> Artificial Sequence</p>	
<p><220> <223> Synthetic oligonucleotide</p>	
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<210> 165
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 <212> DNA
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 <220>
 <223> Synthetic oligonucleotide

 <400> 165
 ggtcctgtgc gaaaatcgat aggccctgca gctg 34

 <210> 166
 <211> 24
 <212> DNA
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 <220>
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 <400> 166
 cacctctcat gctctgctct cttc 24

 <210> 167
 <211> 25
 <212> DNA
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 <220>
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 <400> 167
 gctagaccgt ttccttgaac acctg 25

 <210> 168
 <211> 3373
 <212> DNA
 <213> Homo sapiens

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 <221> misc_feature
 <222> (0)...(0)
 <223> Human TLR7 cDNA

 <400> 168
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 aaaatggtgt ttccaatgtg gacactgaag agacaaattc ttatcctttt taacataatc 180
 ctaatttcca aactccttgg ggctagatgg tttcctaaaa ctctgccttg tgatgtcact 240
 ctggatgttc caaagaacca tgtgatcgtg gactgcacag acaagcattt gacagaaatt 300
 cctggaggta ttcccacgaa caccacgaac ctcaccctca ccattaacca cataccagac 360
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<210> 169
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 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (0)...(0)
 <223> Human TLR7 ORF

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gatgtttcaa	agaaccatgt	gatcgtggac	tgcacagaca	agcatttgac	agaaattcct	180
ggaggtattc	ccacgaacac	cacgaacctc	accctcacca	ttaaccacat	accagacatc	240
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gttcttgat	c	ttggc	actaa		ctttat	aaaa	attgt	caacc	tcagc	atgtt	1260
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ctgatgat	ga	acgac	aatga		catct	cttcc	tccacc	cagca	ggacc	atgga	1860
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tccctaagt	t	tcttg	ccttc		tggag	tttt	gatgg	tatgc	ctccaa	atct	2040
tctttggcc	a	aaaat	gggtc		caaat	ctttc	agttg	gaaga	aactcc	cagt	2100
ctggaaact	t	tggac	ctcag		ccaca	accaa	ctgacc	actg	tccct	gagag	2160
tgttccaga	a	gcctc	aagaa		tctga	tctct	aagaat	aatc	aaatc	aggag	2220
tattttct	ac	aagat	gcctt		ccagt	tgca	tatct	ggatc	tcagt	ctaaa	2280
atgatccaa	a	agacc	agctt		cccag	aaaat	gtcct	caaca	atctg	aagat	2340
catcataat	c	ggttt	ctgtg		cacct	gtgat	gctgt	gtgtg	ttgtc	tggtg	2400
acggaggt	ga	ctatt	cctta		cctgg	ccaca	gatgt	gactt	gtgtg	ggggcc	2460
aagggccaa	a	gtgtg	atctc		cctgg	atctg	tacac	ctgtg	agttag	atct	2520
attctgttt	c	cactt	tccat		atctg	tatct	ctctt	ctctca	tggat	gat	2580
cacctctat	t	tctgg	gatgt		gtggt	atat	taccat	ttct	gtaag	gccaa	2640
tatcagcgt	c	taatat	cacc		agact	gttgc	tatgat	gctt	ttatt	gtgta	2700
gacccagct	g	tgacc	gagtg		ggttt	tggt	gagct	ggtgg	ccaaac	tgga	2760
gagaaacatt	t	ttaatt	ttag		tctcg	aggaa	aggg	actggt	tacc	agggca	2820
gaaaacctt	t	cccag	agcat		acagc	ttagc	aaaaa	agacag	tgttt	gtgat	2880
tatgcaaaga	a	ctgaaa	aattt		taaga	tagca	ttttac	ttgt	cccat	cagag	2940
gaaaaagtt	g	atgtg	attat		cttgat	attt	cttgaga	aagc	ctttt	cagaa	3000
ctccagctc	c	ggaaa	aggct		ctgtg	ggagt	tctgt	ccttg	agtg	gccaac	3060
gctcacccat	t	acttc	tggca		gtgtc	taaag	aacgc	ccttg	ccacag	acaa	3120
tatagtcagg	t	gtttc	aagga		aacg	gtc					3147

<210> 170
 <211> 1049
 <212> PRT
 <213> Homo sapiens

<400> 170
 Met Val Phe Pro Met Trp Thr Leu Lys Arg Gln Ile Leu Ile Leu Phe
 1 5 10 15
 Asn Ile Ile Leu Ile Ser Lys Leu Leu Gly Ala Arg Trp Phe Pro Lys
 20 25 30

Thr	Leu	Pro	Cys	Asp	Val	Thr	Leu	Asp	Val	Pro	Lys	Asn	His	Val	Ile
		35					40					45			
Val	Asp	Cys	Thr	Asp	Lys	His	Leu	Thr	Glu	Ile	Pro	Gly	Gly	Ile	Pro
	50					55					60				
Thr	Asn	Thr	Thr	Asn	Leu	Thr	Leu	Thr	Ile	Asn	His	Ile	Pro	Asp	Ile
65					70					75					80
Ser	Pro	Ala	Ser	Phe	His	Arg	Leu	Asp	His	Leu	Val	Glu	Ile	Asp	Phe
				85					90					95	
Arg	Cys	Asn	Cys	Val	Pro	Ile	Pro	Leu	Gly	Ser	Lys	Asn	Asn	Met	Cys
			100					105					110		
Ile	Lys	Arg	Leu	Gln	Ile	Lys	Pro	Arg	Ser	Phe	Ser	Gly	Leu	Thr	Tyr
		115					120					125			
Leu	Lys	Ser	Leu	Tyr	Leu	Asp	Gly	Asn	Gln	Leu	Leu	Glu	Ile	Pro	Gln
	130					135					140				
Gly	Leu	Pro	Pro	Ser	Leu	Gln	Leu	Leu	Ser	Leu	Glu	Ala	Asn	Asn	Ile
145					150					155					160
Phe	Ser	Ile	Arg	Lys	Glu	Asn	Leu	Thr	Glu	Leu	Ala	Asn	Ile	Glu	Ile
				165					170					175	
Leu	Tyr	Leu	Gly	Gln	Asn	Cys	Tyr	Tyr	Arg	Asn	Pro	Cys	Tyr	Val	Ser
		180					185						190		
Tyr	Ser	Ile	Glu	Lys	Asp	Ala	Phe	Leu	Asn	Leu	Thr	Lys	Leu	Lys	Val
		195					200					205			
Leu	Ser	Leu	Lys	Asp	Asn	Asn	Val	Thr	Ala	Val	Pro	Thr	Val	Leu	Pro
	210					215					220				
Ser	Thr	Leu	Thr	Glu	Leu	Tyr	Leu	Tyr	Asn	Asn	Met	Ile	Ala	Lys	Ile
225					230					235					240
Gln	Glu	Asp	Asp	Phe	Asn	Asn	Leu	Asn	Gln	Leu	Gln	Ile	Leu	Asp	Leu
				245					250					255	
Ser	Gly	Asn	Cys	Pro	Arg	Cys	Tyr	Asn	Ala	Pro	Phe	Pro	Cys	Ala	Pro
		260					265						270		
Cys	Lys	Asn	Asn	Ser	Pro	Leu	Gln	Ile	Pro	Val	Asn	Ala	Phe	Asp	Ala
	275						280					285			
Leu	Thr	Glu	Leu	Lys	Val	Leu	Arg	Leu	His	Ser	Asn	Ser	Leu	Gln	His
	290					295					300				
Val	Pro	Pro	Arg	Trp	Phe	Lys	Asn	Ile	Asn	Lys	Leu	Gln	Glu	Leu	Asp
305					310					315					320
Leu	Ser	Gln	Asn	Phe	Leu	Ala	Lys	Glu	Ile	Gly	Asp	Ala	Lys	Phe	Leu
				325					330					335	
His	Phe	Leu	Pro	Ser	Leu	Ile	Gln	Leu	Asp	Leu	Ser	Phe	Asn	Phe	Glu
		340					345						350		
Leu	Gln	Val	Tyr	Arg	Ala	Ser	Met	Asn	Leu	Ser	Gln	Ala	Phe	Ser	Ser
	355					360						365			
Leu	Lys	Ser	Leu	Lys	Ile	Leu	Arg	Ile	Arg	Gly	Tyr	Val	Phe	Lys	Glu
	370					375					380				
Leu	Lys	Ser	Phe	Asn	Leu	Ser	Pro	Leu	His	Asn	Leu	Gln	Asn	Leu	Glu
385					390					395					400
Val	Leu	Asp	Leu	Gly	Thr	Asn	Phe	Ile	Lys	Ile	Ala	Asn	Leu	Ser	Met
				405					410					415	
Phe	Lys	Gln	Phe	Lys	Arg	Leu	Lys	Val	Ile	Asp	Leu	Ser	Val	Asn	Lys
		420					425						430		
Ile	Ser	Pro	Ser	Gly	Asp	Ser	Ser	Glu	Val	Gly	Phe	Cys	Ser	Asn	Ala
	435					440						445			
Arg	Thr	Ser	Val	Glu	Ser	Tyr	Glu	Pro	Gln	Val	Leu	Glu	Gln	Leu	His
	450					455					460				
Tyr	Phe	Arg	Tyr	Asp	Lys	Tyr	Ala	Arg	Ser	Cys	Arg	Phe	Lys	Asn	Lys
465					470					475					480
Glu	Ala	Ser	Phe	Met	Ser	Val	Asn	Glu	Ser	Cys	Tyr	Lys	Tyr	Gly	Gln
				485					490					495	
Thr	Leu	Asp	Leu	Ser	Lys	Asn	Ser	Ile	Phe	Phe	Val	Lys	Ser	Ser	Asp

Arg	Leu	Met	Asp	Glu	Lys	Val	Asp	Val	Ile	Ile	Leu	Ile	Phe	Leu	Glu
			980					985					990		
Lys	Pro	Phe	Gln	Lys	Ser	Lys	Phe	Leu	Gln	Leu	Arg	Lys	Arg	Leu	Cys
		995					1000					1005			
Gly	Ser	Ser	Val	Leu	Glu	Trp	Pro	Thr	Asn	Pro	Gln	Ala	His	Pro	Tyr
	1010					1015					1020				
Phe	Trp	Gln	Cys	Leu	Lys	Asn	Ala	Leu	Ala	Thr	Asp	Asn	His	Val	Ala
1025					1030					1035					1040
Tyr	Ser	Gln	Val	Phe	Lys	Glu	Thr	Val							
				1045											

<210> 171
 <211> 989
 <212> PRT
 <213> Homo sapiens

Met	Val	Phe	Pro	Met	Trp	Thr	Leu	Lys	Arg	Gln	Ile	Leu	Ile	Leu	Phe
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Asn	Ile	Ile	Leu	Ile	Ser	Lys	Leu	Leu	Gly	Ala	Arg	Trp	Phe	Pro	Lys
			20					25					30		
Thr	Leu	Pro	Cys	Asp	Val	Thr	Leu	Asp	Val	Pro	Lys	Asn	His	Val	Ile
		35					40					45			
Val	Asp	Cys	Thr	Asp	Lys	His	Leu	Thr	Glu	Ile	Pro	Gly	Gly	Ile	Pro
	50					55					60				
Thr	Asn	Thr	Thr	Asn	Leu	Thr	Leu	Thr	Ile	Asn	His	Ile	Pro	Asp	Ile
65					70					75					80
Ser	Pro	Ala	Ser	Phe	His	Arg	Leu	Asp	His	Leu	Val	Glu	Ile	Asp	Phe
				85					90					95	
Arg	Cys	Asn	Cys	Val	Pro	Ile	Pro	Leu	Gly	Ser	Lys	Asn	Asn	Met	Cys
			100					105					110		
Ile	Lys	Arg	Leu	Gln	Ile	Lys	Pro	Arg	Ser	Phe	Ser	Gly	Leu	Thr	Tyr
		115					120					125			
Leu	Lys	Ser	Leu	Tyr	Leu	Asp	Gly	Asn	Gln	Leu	Leu	Glu	Ile	Pro	Gln
	130					135					140				
Gly	Leu	Pro	Pro	Ser	Leu	Gln	Leu	Leu	Ser	Leu	Glu	Ala	Asn	Asn	Ile
145					150					155					160
Phe	Ser	Ile	Arg	Lys	Glu	Asn	Leu	Thr	Glu	Leu	Ala	Asn	Ile	Glu	Ile
				165					170					175	
Leu	Tyr	Leu	Gly	Gln	Asn	Cys	Tyr	Tyr	Arg	Asn	Pro	Cys	Tyr	Val	Ser
			180					185					190		
Tyr	Ser	Ile	Glu	Lys	Asp	Ala	Phe	Leu	Asn	Leu	Thr	Lys	Leu	Lys	Val
		195					200					205			
Leu	Ser	Leu	Lys	Asp	Asn	Asn	Val	Thr	Ala	Val	Pro	Thr	Val	Leu	Pro
	210					215						220			
Ser	Thr	Leu	Thr	Glu	Leu	Tyr	Leu	Tyr	Asn	Asn	Met	Ile	Ala	Lys	Ile
225					230					235					240
Gln	Glu	Asp	Asp	Phe	Asn	Asn	Leu	Asn	Gln	Leu	Gln	Ile	Leu	Asp	Leu
				245					250					255	
Ser	Gly	Asn	Cys	Pro	Arg	Cys	Tyr	Asn	Ala	Pro	Phe	Pro	Cys	Ala	Pro
			260					265					270		
Cys	Lys	Asn	Asn	Ser	Pro	Leu	Gln	Ile	Pro	Val	Asn	Ala	Phe	Asp	Ala
		275					280					285			
Leu	Thr	Glu	Leu	Lys	Val	Leu	Arg	Leu	His	Ser	Asn	Ser	Leu	Gln	His
	290					295					300				
Val	Pro	Pro	Arg	Trp	Phe	Lys	Asn	Ile	Asn	Lys	Leu	Gln	Glu	Leu	Asp
305					310					315					320
Leu	Ser	Gln	Asn	Phe	Leu	Ala	Lys	Glu	Ile	Gly	Asp	Ala	Lys	Phe	Leu
				325					330					335	

His	Phe	Leu	Pro	Ser	Leu	Ile	Gln	Leu	Asp	Leu	Ser	Phe	Asn	Phe	Glu
			340					345					350		
Leu	Gln	Val	Tyr	Arg	Ala	Ser	Met	Asn	Leu	Ser	Gln	Ala	Phe	Ser	Ser
		355					360					365			
Leu	Lys	Ser	Leu	Lys	Ile	Leu	Arg	Ile	Arg	Gly	Tyr	Val	Phe	Lys	Glu
	370					375					380				
Leu	Lys	Ser	Phe	Asn	Leu	Ser	Pro	Leu	His	Asn	Leu	Gln	Asn	Leu	Glu
385					390					395					400
Val	Leu	Asp	Leu	Gly	Thr	Asn	Phe	Ile	Lys	Ile	Ala	Asn	Leu	Ser	Met
				405					410						415
Phe	Lys	Gln	Phe	Lys	Arg	Leu	Lys	Val	Ile	Asp	Leu	Ser	Val	Asn	Lys
			420					425					430		
Ile	Ser	Pro	Ser	Gly	Asp	Ser	Ser	Glu	Val	Gly	Phe	Cys	Ser	Asn	Ala
		435					440					445			
Arg	Thr	Ser	Val	Glu	Ser	Tyr	Glu	Pro	Gln	Val	Leu	Glu	Gln	Leu	His
	450					455					460				
Tyr	Phe	Arg	Tyr	Asp	Lys	Tyr	Ala	Arg	Ser	Cys	Arg	Phe	Lys	Asn	Lys
465					470					475					480
Glu	Ala	Ser	Phe	Met	Ser	Val	Asn	Glu	Ser	Cys	Tyr	Lys	Tyr	Gly	Gln
				485					490						495
Thr	Leu	Asp	Leu	Ser	Lys	Asn	Ser	Ile	Phe	Phe	Val	Lys	Ser	Ser	Asp
			500					505					510		
Phe	Gln	His	Leu	Ser	Phe	Leu	Lys	Cys	Leu	Asn	Leu	Ser	Gly	Asn	Leu
	515						520					525			
Ile	Ser	Gln	Thr	Leu	Asn	Gly	Ser	Glu	Phe	Gln	Pro	Leu	Met	Met	Asn
	530					535					540				
Asp	Asn	Asp	Ile	Ser	Ser	Ser	Thr	Ser	Arg	Thr	Met	Glu	Ser	Glu	Ser
545					550					555					560
Leu	Arg	Thr	Leu	Glu	Phe	Arg	Gly	Asn	His	Leu	Asp	Val	Leu	Trp	Arg
				565					570						575
Glu	Gly	Asp	Asn	Arg	Tyr	Leu	Gln	Leu	Phe	Lys	Asn	Leu	Leu	Lys	Leu
			580					585					590		
Glu	Glu	Leu	Asp	Ile	Ser	Lys	Asn	Ser	Leu	Ser	Phe	Leu	Pro	Ser	Gly
		595					600					605			
Val	Phe	Asp	Gly	Met	Pro	Pro	Asn	Leu	Lys	Asn	Leu	Ser	Leu	Ala	Lys
	610					615					620				
Asn	Gly	Leu	Lys	Ser	Phe	Ser	Trp	Lys	Lys	Leu	Gln	Cys	Leu	Lys	Asn
625					630					635					640
Leu	Glu	Thr	Leu	Asp	Leu	Ser	His	Asn	Gln	Leu	Thr	Thr	Val	Pro	Glu
				645					650						655
Arg	Leu	Ser	Asn	Cys	Ser	Arg	Ser	Leu	Lys	Asn	Leu	Ile	Leu	Lys	Asn
			660					665					670		
Asn	Gln	Ile	Arg	Ser	Leu	Thr	Lys	Tyr	Phe	Leu	Gln	Asp	Ala	Phe	Gln
		675					680					685			
Leu	Arg	Tyr	Leu	Asp	Leu	Ser	Ser	Asn	Lys	Ile	Gln	Met	Ile	Gln	Lys
	690					695					700				
Thr	Ser	Phe	Pro	Glu	Asn	Val	Leu	Asn	Asn	Leu	Lys	Met	Leu	Leu	Leu
705					710					715					720
His	His	Asn	Arg	Phe	Leu	Cys	Thr	Cys	Asp	Ala	Val	Trp	Phe	Val	Trp
				725					730					735	
Trp	Val	Asn	His	Thr	Glu	Val	Thr	Ile	Pro	Tyr	Leu	Ala	Thr	Asp	Val
			740					745					750		
Thr	Cys	Val	Gly	Pro	Gly	Ala	His	Lys	Gly	Gln	Ser	Val	Ile	Ser	Leu
		755					760					765			
Asp	Leu	Tyr	Thr	Cys	Glu	Leu	Asp	Leu	Thr	Asn	Leu	Ile	Leu	Phe	Ser
	770					775					780				
Leu	Ser	Ile	Ser	Val	Ser	Leu	Phe	Leu	Met	Val	Met	Met	Thr	Ala	Ser
785					790					795					800
His	Leu	Tyr	Phe	Trp	Asp	Val	Trp	Tyr	Ile	Tyr	His	Phe	Cys	Lys	Ala

				805					810					815					
Lys	Ile	Lys	Gly	Tyr	Gln	Arg	Leu	Ile	Ser	Pro	Asp	Cys	Cys	Tyr	Asp				
			820					825					830						
Ala	Phe	Ile	Val	Tyr	Asp	Thr	Lys	Asp	Pro	Ala	Val	Thr	Glu	Trp	Val				
		835					840					845							
Leu	Ala	Glu	Leu	Val	Ala	Lys	Leu	Glu	Asp	Pro	Arg	Glu	Lys	His	Phe				
	850					855					860								
Asn	Leu	Cys	Leu	Glu	Glu	Arg	Asp	Trp	Leu	Pro	Gly	Gln	Pro	Val	Leu				
865					870					875					880				
Glu	Asn	Leu	Ser	Gln	Ser	Ile	Gln	Leu	Ser	Lys	Lys	Thr	Val	Phe	Val				
				885					890					895					
Met	Thr	Asp	Lys	Tyr	Ala	Lys	Thr	Glu	Asn	Phe	Lys	Ile	Ala	Phe	Tyr				
			900					905					910						
Leu	Ser	His	Gln	Arg	Leu	Met	Asp	Glu	Lys	Val	Asp	Val	Ile	Ile	Leu				
		915				920						925							
Ile	Phe	Leu	Glu	Lys	Pro	Phe	Gln	Lys	Ser	Lys	Phe	Leu	Gln	Leu	Arg				
	930					935					940								
Lys	Arg	Leu	Cys	Gly	Ser	Ser	Val	Leu	Glu	Trp	Pro	Thr	Asn	Pro	Gln				
945					950					955					960				
Ala	His	Pro	Tyr	Phe	Trp	Gln	Cys	Leu	Lys	Asn	Ala	Leu	Ala	Thr	Asp				
				965					970					975					
Asn	His	Val	Ala	Tyr	Ser	Gln	Val	Phe	Lys	Glu	Thr	Val							
			980					985											

<210> 172

<211> 1049

<212> PRT

<213> Homo sapiens

<400> 172

Met	Val	Phe	Pro	Met	Trp	Thr	Leu	Lys	Arg	Gln	Ile	Leu	Ile	Leu	Phe				
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Asn	Ile	Ile	Leu	Ile	Ser	Lys	Leu	Leu	Gly	Ala	Arg	Trp	Phe	Pro	Lys				
			20					25					30						
Thr	Leu	Pro	Cys	Asp	Val	Thr	Leu	Asp	Val	Pro	Lys	Asn	His	Val	Ile				
		35					40					45							
Val	Asp	Cys	Thr	Asp	Lys	His	Leu	Thr	Glu	Ile	Pro	Gly	Gly	Ile	Pro				
	50				55					60									
Thr	Asn	Thr	Thr	Asn	Leu	Thr	Leu	Thr	Ile	Asn	His	Ile	Pro	Asp	Ile				
65				70					75					80					
Ser	Pro	Ala	Ser	Phe	His	Arg	Leu	Asp	His	Leu	Val	Glu	Ile	Asp	Phe				
				85				90						95					
Arg	Cys	Asn	Cys	Val	Pro	Ile	Pro	Leu	Gly	Ser	Lys	Asn	Asn	Met	Cys				
		100						105					110						
Ile	Lys	Arg	Leu	Gln	Ile	Lys	Pro	Arg	Ser	Phe	Ser	Gly	Leu	Thr	Tyr				
	115						120					125							
Leu	Lys	Ser	Leu	Tyr	Leu	Asp	Gly	Asn	Gln	Leu	Leu	Glu	Ile	Pro	Gln				
	130				135					140									
Gly	Leu	Pro	Pro	Ser	Leu	Gln	Leu	Leu	Ser	Leu	Glu	Ala	Asn	Asn	Ile				
145				150					155						160				
Phe	Ser	Ile	Arg	Lys	Glu	Asn	Leu	Thr	Glu	Leu	Ala	Asn	Ile	Glu	Ile				
			165					170						175					
Leu	Tyr	Leu	Gly	Gln	Asn	Cys	Tyr	Tyr	Arg	Asn	Pro	Cys	Tyr	Val	Ser				
	180						185					190							
Tyr	Ser	Ile	Glu	Lys	Asp	Ala	Phe	Leu	Asn	Leu	Thr	Lys	Leu	Lys	Val				
	195					200						205							
Leu	Ser	Leu	Lys	Asp	Asn	Asn	Val	Thr	Ala	Val	Pro	Thr	Val	Leu	Pro				
	210				215						220								
Ser	Thr	Leu	Thr	Glu	Leu	Tyr	Leu	Tyr	Asn	Asn	Met	Ile	Ala	Lys	Ile				

225					230					235				240
Gln	Glu	Asp	Asp	Phe	Asn	Asn	Leu	Asn	Gln	Leu	Gln	Ile	Leu	Asp
				245					250					255
Ser	Gly	Asn	Cys	Pro	Arg	Cys	Tyr	Asn	Ala	Pro	Phe	Pro	Cys	Ala
				260					265					270
Cys	Lys	Asn	Asn	Ser	Pro	Leu	Gln	Ile	Pro	Val	Asn	Ala	Phe	Asp
				275					280					285
Leu	Thr	Glu	Leu	Lys	Val	Leu	Arg	Leu	His	Ser	Asn	Ser	Leu	Gln
				290					295					300
Val	Pro	Pro	Arg	Trp	Phe	Lys	Asn	Ile	Asn	Lys	Leu	Gln	Glu	Leu
				305					310					320
Leu	Ser	Gln	Asn	Phe	Leu	Ala	Lys	Glu	Ile	Gly	Asp	Ala	Lys	Phe
				325					330					335
His	Phe	Leu	Pro	Ser	Leu	Ile	Gln	Leu	Asp	Leu	Ser	Phe	Asn	Phe
				340					345					350
Leu	Gln	Val	Tyr	Arg	Ala	Ser	Met	Asn	Leu	Ser	Gln	Ala	Phe	Ser
				355					360					365
Leu	Lys	Ser	Leu	Lys	Ile	Leu	Arg	Ile	Arg	Gly	Tyr	Val	Phe	Lys
				370					375					380
Leu	Lys	Ser	Phe	Asn	Leu	Ser	Pro	Leu	His	Asn	Leu	Gln	Asn	Leu
				385					390					400
Val	Leu	Asp	Leu	Gly	Thr	Asn	Phe	Ile	Lys	Ile	Ala	Asn	Leu	Ser
				405					410					415
Phe	Lys	Gln	Phe	Lys	Arg	Leu	Lys	Val	Ile	Asp	Leu	Ser	Val	Asn
				420					425					430
Ile	Ser	Pro	Ser	Gly	Asp	Ser	Ser	Glu	Val	Gly	Phe	Cys	Ser	Asn
				435					440					445
Arg	Thr	Ser	Val	Glu	Ser	Tyr	Glu	Pro	Gln	Val	Leu	Glu	Gln	Leu
				450					455					460
Tyr	Phe	Arg	Tyr	Asp	Lys	Tyr	Ala	Arg	Ser	Cys	Arg	Phe	Lys	Asn
				465					470					480
Glu	Ala	Ser	Phe	Met	Ser	Val	Asn	Glu	Ser	Cys	Tyr	Lys	Tyr	Gly
				485					490					495
Thr	Leu	Asp	Leu	Ser	Lys	Asn	Ser	Ile	Phe	Phe	Val	Lys	Ser	Ser
				500					505					510
Phe	Gln	His	Leu	Ser	Phe	Leu	Lys	Cys	Leu	Asn	Leu	Ser	Gly	Asn
				515					520					525
Ile	Ser	Gln	Thr	Leu	Asn	Gly	Ser	Glu	Phe	Gln	Pro	Leu	Ala	Glu
				530					535					540
Arg	Tyr	Leu	Asp	Phe	Ser	Asn	Asn	Arg	Leu	Asp	Leu	Leu	His	Ser
				545					550					560
Ala	Phe	Glu	Glu	Leu	His	Lys	Leu	Glu	Val	Leu	Asp	Ile	Ser	Ser
				565					570					575
Ser	His	Tyr	Phe	Gln	Ser	Glu	Gly	Ile	Thr	His	Met	Leu	Asn	Phe
				580					585					590
Lys	Asn	Leu	Lys	Val	Leu	Gln	Lys	Leu	Met	Met	Asn	Asp	Asn	Asp
				595					600					605
Ser	Ser	Ser	Thr	Ser	Arg	Thr	Met	Glu	Ser	Glu	Ser	Leu	Arg	Thr
				610					615					620
Glu	Phe	Arg	Gly	Asn	His	Leu	Asp	Val	Leu	Trp	Arg	Glu	Gly	Asp
				625					630					640
Arg	Tyr	Leu	Gln	Leu	Phe	Lys	Asn	Leu	Leu	Lys	Leu	Glu	Glu	Leu
				645					650					655
Ile	Ser	Lys	Asn	Ser	Leu	Ser	Phe	Leu	Pro	Ser	Gly	Val	Phe	Asp
				660					665					670
Met	Pro	Pro	Asn	Leu	Lys	Asn	Leu	Ser	Leu	Ala	Lys	Asn	Gly	Leu
				675					680					685
Ser	Phe	Ser	Trp	Lys	Lys	Leu	Gln	Cys	Leu	Lys	Asn	Leu	Glu	Thr
				690					695					700

Asp	Leu	Ser	His	Asn	Gln	Leu	Thr	Thr	Val	Pro	Glu	Arg	Leu	Ser	Asn
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Cys	Ser	Arg	Ser	His	Lys	Asn	Leu	Ile	Leu	Lys	Asn	Asn	Gln	Ile	Arg
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Ser	Pro	Thr	Lys	Tyr	Phe	Leu	Gln	Asp	Ala	Phe	Gln	Leu	Arg	Tyr	Leu
			740					745					750		
Asp	Leu	Ser	Ser	Asn	Lys	Ile	Gln	Met	Ile	Gln	Lys	Thr	Ser	Phe	Pro
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Glu	Asn	Val	Leu	Asn	Asn	Leu	Lys	Met	Leu	Leu	Leu	His	His	Asn	Arg
	770					775					780				
Phe	Leu	Cys	Thr	Cys	Asp	Ala	Val	Trp	Phe	Val	Trp	Trp	Val	Asn	His
785					790					795					800
Thr	Glu	Val	Thr	Ile	Pro	Tyr	Leu	Ala	Thr	Asp	Val	Thr	Cys	Val	Gly
				805					810					815	
Pro	Gly	Ala	His	Lys	Gly	Gln	Ser	Val	Ile	Ser	Leu	Asp	Leu	Tyr	Thr
			820					825					830		
Cys	Glu	Leu	Asp	Leu	Thr	Asn	Leu	Ile	Leu	Phe	Ser	Leu	Ser	Ile	Ser
		835					840					845			
Val	Ser	Leu	Phe	Leu	Met	Val	Met	Met	Thr	Ala	Ser	His	Leu	Tyr	Phe
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Trp	Asp	Val	Trp	Tyr	Ile	Tyr	His	Phe	Cys	Lys	Ala	Lys	Ile	Lys	Gly
865					870					875					880
Tyr	Gln	Arg	Leu	Ile	Ser	Pro	Asp	Cys	Cys	Tyr	Asp	Ala	Phe	Ile	Val
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Tyr	Asp	Thr	Lys	Asp	Pro	Ala	Val	Thr	Glu	Trp	Val	Leu	Ala	Glu	Leu
		900						905					910		
Val	Ala	Lys	Leu	Glu	Asp	Pro	Arg	Glu	Lys	His	Phe	Asn	Leu	Cys	Leu
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Glu	Glu	Arg	Asp	Trp	Leu	Pro	Gly	Gln	Pro	Val	Leu	Glu	Asn	Leu	Ser
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Gln	Ser	Ile	Gln	Leu	Ser	Lys	Lys	Thr	Val	Phe	Val	Met	Thr	Asp	Lys
945					950					955					960
Tyr	Ala	Lys	Thr	Glu	Asn	Phe	Lys	Ile	Ala	Phe	Tyr	Leu	Ser	His	Gln
			965						970					975	
Arg	Leu	Met	Asp	Glu	Lys	Val	Asp	Val	Ile	Ile	Leu	Ile	Phe	Leu	Glu
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Lys	Pro	Phe	Gln	Lys	Ser	Lys	Phe	Leu	Gln	Leu	Arg	Lys	Arg	Leu	Cys
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<210> 173

<211> 3243

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (0)...(0)

<223> Murine TLR7 cDNA

<400> 173

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gcccattgtga	tcggtggactg	cacagacaag	catttgacag	aaatccctga	gggcattccc	240
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<210> 174
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 <212> DNA
 <213> Mus musculus

<220>

<221> misc_feature
 <222> (0)...(0)
 <223> Murine TLR7 ORF

<400> 174

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<210> 175
 <211> 1050
 <212> PRT
 <213> Mus musculus

<400> 175
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 Thr Leu Pro Cys Glu Val Lys Val Asn Ile Pro Glu Ala His Val Ile
 35 40 45
 Val Asp Cys Thr Asp Lys His Leu Thr Glu Ile Pro Glu Gly Ile Pro
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 Thr Asn Thr Thr Asn Leu Thr Leu Thr Ile Asn His Ile Pro Ser Ile
 65 70 75 80
 Ser Pro Asp Ser Phe Arg Arg Leu Asn His Leu Glu Glu Ile Asp Leu
 85 90 95
 Arg Cys Asn Cys Val Pro Val Leu Leu Gly Ser Lys Ala Asn Val Cys
 100 105 110
 Thr Lys Arg Leu Gln Ile Arg Pro Gly Ser Phe Ser Gly Leu Ser Asp
 115 120 125
 Leu Lys Ala Leu Tyr Leu Asp Gly Asn Gln Leu Leu Glu Ile Pro Gln
 130 135 140
 Asp Leu Pro Ser Ser Leu His Leu Leu Ser Leu Glu Ala Asn Asn Ile
 145 150 155 160
 Phe Ser Ile Thr Lys Glu Asn Leu Thr Glu Leu Val Asn Ile Glu Thr
 165 170 175
 Leu Tyr Leu Gly Gln Asn Cys Tyr Tyr Arg Asn Pro Cys Asn Val Ser
 180 185 190
 Tyr Ser Ile Glu Lys Asp Ala Phe Leu Val Met Arg Asn Leu Lys Val
 195 200 205
 Leu Ser Leu Lys Asp Asn Asn Val Thr Ala Val Pro Thr Thr Leu Pro
 210 215 220
 Pro Asn Leu Leu Glu Leu Tyr Leu Tyr Asn Asn Ile Ile Lys Lys Ile
 225 230 235 240
 Gln Glu Asn Asp Phe Asn Asn Leu Asn Glu Leu Gln Val Leu Asp Leu
 245 250 255
 Ser Gly Asn Cys Pro Arg Cys Tyr Asn Val Pro Tyr Pro Cys Thr Pro
 260 265 270
 Cys Glu Asn Asn Ser Pro Leu Gln Ile His Asp Asn Ala Phe Asn Ser
 275 280 285
 Leu Thr Glu Leu Lys Val Leu Arg Leu His Ser Asn Ser Leu Gln His
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 Val Pro Pro Thr Trp Phe Lys Asn Met Arg Asn Leu Gln Glu Leu Asp
 305 310 315 320
 Leu Ser Gln Asn Tyr Leu Ala Arg Glu Ile Glu Glu Ala Lys Phe Leu
 325 330 335
 His Phe Leu Pro Asn Leu Val Glu Leu Asp Phe Ser Phe Asn Tyr Glu
 340 345 350
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 355 360 365
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 370 375 380
 Leu Lys Asn Ser Ser Leu Ser Val Leu His Lys Leu Pro Arg Leu Glu
 385 390 395 400
 Val Leu Asp Leu Gly Thr Asn Phe Ile Lys Ile Ala Asp Leu Asn Ile
 405 410 415
 Phe Lys His Phe Glu Asn Leu Lys Leu Ile Asp Leu Ser Val Asn Lys

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Leu	Glu	Glu	Arg	Asp	Trp	Leu	Pro	Gly	Gln	Pro	Val	Leu	Glu	Asn	Leu
	930					935						940			
Ser	Gln	Ser	Ile	Gln	Leu	Ser	Lys	Lys	Thr	Val	Phe	Val	Met	Thr	Gln
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Lys	Tyr	Ala	Lys	Thr	Glu	Ser	Phe	Lys	Met	Ala	Phe	Tyr	Leu	Ser	His
			965						970					975	
Gln	Arg	Leu	Leu	Asp	Glu	Lys	Val	Asp	Val	Ile	Ile	Leu	Ile	Phe	Leu
			980					985					990		
Glu	Lys	Pro	Leu	Gln	Lys	Ser	Lys	Phe	Leu	Gln	Leu	Arg	Lys	Arg	Leu
		995					1000					1005			
Cys	Arg	Ser	Ser	Val	Leu	Glu	Trp	Pro	Ala	Asn	Pro	Gln	Ala	His	Pro
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Tyr	Phe	Trp	Gln	Cys	Leu	Lys	Asn	Ala	Leu	Thr	Thr	Asp	Asn	His	Val
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<210> 176
 <211> 66
 <212> PRT
 <213> Mus musculus

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			20					25					30		
Pro	Pro	Asn	Pro	Gln	Ala	His	Pro	Tyr	Phe	Cys	Gln	Cys	Leu	Lys	Asn
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Ala	Leu	Thr	Thr	Asp	Asn	His	Val	Ala	Tyr	Ser	Gln	Met	Phe	Lys	Glu
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Thr	Val														
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<210> 177
 <211> 54
 <212> PRT
 <213> Mus musculus

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Cys	Leu	Lys	Asn	Ala	Leu	Thr	Thr	Asp	Asn	His	Val	Ala	Tyr	Ser	Gln
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Met	Phe	Lys	Glu	Thr	Val										
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<210> 178
 <211> 59
 <212> PRT
 <213> Mus musculus

<400> 178

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 35 40 45
 Val Ala Tyr Ser Gln Met Phe Lys Glu Thr Val
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<210> 179
 <211> 84
 <212> PRT
 <213> Mus musculus

<400> 179
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 Ser Lys Phe Leu Gln Leu Arg Lys Arg Phe Cys Arg Ser Ser Val Leu
 35 40 45
 Glu Trp Pro Ala Asn Pro Gln Ala His Pro Tyr Phe Trp Gln Cys Leu
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 65 70 75 80
 Lys Glu Thr Val

<210> 180
 <211> 25
 <212> DNA
 <213> Artificial Sequence

<220>
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<210> 181
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 <212> DNA
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<220>
 <223> Synthetic oligonucleotide

<400> 181
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<210> 182
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 <212> DNA
 <213> Homo sapiens

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 <222> (0)...(0)
 <223> Human TLR8 cDNA

<400> 182

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tttcatcaca	cacataacga	atgaatcatt	tcaagggctg	caaaatctca	ctaaaataaa	360
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 <212> DNA
 <213> Homo sapiens

<220>
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 <223> Human TLR8 ORF

<400> 183

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 <211> 1041
 <212> PRT
 <213> Homo sapiens

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Ser	Tyr	Pro	Cys	Asp	Glu	Lys	Lys	Gln	Asn	Asp	Ser	Val	Ile	Ala	Glu
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Cys	Ser	Asn	Arg	Arg	Leu	Gln	Glu	Val	Pro	Gln	Thr	Val	Gly	Lys	Tyr
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Val	Thr	Glu	Leu	Asp	Leu	Ser	Asp	Asn	Phe	Ile	Thr	His	Ile	Thr	Asn
65					70					75					80
Glu	Ser	Phe	Gln	Gly	Leu	Gln	Asn	Leu	Thr	Lys	Ile	Asn	Leu	Asn	His
				85					90					95	
Asn	Pro	Asn	Val	Gln	His	Gln	Asn	Gly	Asn	Pro	Gly	Ile	Gln	Ser	Asn
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Gly	Leu	Asn	Ile	Thr	Asp	Gly	Ala	Phe	Leu	Asn	Leu	Lys	Asn	Leu	Arg
		115					120					125			
Glu	Leu	Leu	Leu	Glu	Asp	Asn	Gln	Leu	Pro	Gln	Ile	Pro	Ser	Gly	Leu
	130					135					140				
Pro	Glu	Ser	Leu	Thr	Glu	Leu	Ser	Leu	Ile	Gln	Asn	Asn	Ile	Tyr	Asn
145					150					155					160
Ile	Thr	Lys	Glu	Gly	Ile	Ser	Arg	Leu	Ile	Asn	Leu	Lys	Asn	Leu	Tyr
			165					170						175	
Leu	Ala	Trp	Asn	Cys	Tyr	Phe	Asn	Lys	Val	Cys	Glu	Lys	Thr	Asn	Ile
		180					185						190		
Glu	Asp	Gly	Val	Phe	Glu	Thr	Leu	Thr	Asn	Leu	Glu	Leu	Leu	Ser	Leu
	195						200					205			
Ser	Phe	Asn	Ser	Leu	Ser	His	Val	Pro	Pro	Lys	Leu	Pro	Ser	Ser	Leu
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Arg	Lys	Leu	Phe	Leu	Ser	Asn	Thr	Gln	Ile	Lys	Tyr	Ile	Ser	Glu	Glu
225					230					235					240
Asp	Phe	Lys	Gly	Leu	Ile	Asn	Leu	Thr	Leu	Leu	Asp	Leu	Ser	Gly	Asn
			245						250					255	
Cys	Pro	Arg	Cys	Phe	Asn	Ala	Pro	Phe	Pro	Cys	Val	Pro	Cys	Asp	Gly
			260					265					270		
Gly	Ala	Ser	Ile	Asn	Ile	Asp	Arg	Phe	Ala	Phe	Gln	Asn	Leu	Thr	Gln
	275						280					285			
Leu	Arg	Tyr	Leu	Asn	Leu	Ser	Ser	Thr	Ser	Leu	Arg	Lys	Ile	Asn	Ala
	290					295					300				
Ala	Trp	Phe	Lys	Asn	Met	Pro	His	Leu	Lys	Val	Leu	Asp	Leu	Glu	Phe
305					310					315					320
Asn	Tyr	Leu	Val	Gly	Glu	Ile	Ala	Ser	Gly	Ala	Phe	Leu	Thr	Met	Leu
			325						330					335	
Pro	Arg	Leu	Glu	Ile	Leu	Asp	Leu	Ser	Phe	Asn	Tyr	Ile	Lys	Gly	Ser
		340						345					350		
Tyr	Pro	Gln	His	Ile	Asn	Ile	Ser	Arg	Asn	Phe	Ser	Lys	Leu	Leu	Ser
	355						360					365			
Leu	Arg	Ala	Leu	His	Leu	Arg	Gly	Tyr	Val	Phe	Gln	Glu	Leu	Arg	Glu

370	375	380
Asp Asp Phe Gln Pro	Leu Met Gln Leu Pro	Asn Leu Ser Thr Ile Asn
385	390	395
Leu Gly Ile Asn Phe	Ile Lys Gln Ile Asp	Phe Lys Leu Phe Gln Asn
	405	410
Phe Ser Asn Leu Glu	Ile Ile Tyr Leu Ser	Glu Asn Arg Ile Ser Pro
	420	425
Leu Val Lys Asp Thr	Arg Gln Ser Tyr Ala	Asn Ser Ser Ser Phe Gln
	435	440
Arg His Ile Arg Lys	Arg Arg Ser Thr Asp	Phe Glu Phe Asp Pro His
	450	455
Ser Asn Phe Tyr His	Phe Thr Arg Pro Leu	Ile Lys Pro Gln Cys Ala
	465	470
Ala Tyr Gly Lys Ala	Leu Asp Leu Ser Leu	Asn Ser Ile Phe Phe Ile
	485	490
Gly Pro Asn Gln Phe	Glu Asn Leu Pro Asp	Ile Ala Cys Leu Asn Leu
	500	505
Ser Ala Asn Ser Asn	Ala Gln Val Leu Ser	Gly Thr Glu Phe Ser Ala
	515	520
Ile Pro His Val Lys	Tyr Leu Asp Leu Thr	Asn Asn Arg Leu Asp Phe
	530	535
Asp Asn Ala Ser Ala	Leu Thr Glu Leu Ser	Asp Leu Glu Val Leu Asp
	545	550
Leu Ser Tyr Asn Ser	His Tyr Phe Arg Ile	Ala Gly Val Thr His His
	565	570
Leu Glu Phe Ile Gln	Asn Phe Thr Asn Leu	Lys Val Leu Asn Leu Ser
	580	585
His Asn Asn Ile Tyr	Thr Leu Thr Asp Lys	Tyr Asn Leu Glu Ser Lys
	595	600
Ser Leu Val Glu Leu	Val Phe Ser Gly Asn	Arg Leu Asp Ile Leu Trp
	610	615
Asn Asp Asp Asp Asn	Arg Tyr Ile Ser Ile	Phe Lys Gly Leu Lys Asn
	625	630
Leu Thr Arg Leu Asp	Leu Ser Leu Asn Arg	Leu Lys His Ile Pro Asn
	645	650
Glu Ala Phe Leu Asn	Leu Pro Ala Ser Leu	Thr Glu Leu His Ile Asn
	660	665
Asp Asn Met Leu Lys	Phe Phe Asn Trp Thr	Leu Leu Gln Gln Phe Pro
	675	680
Arg Leu Glu Leu Leu	Asp Leu Arg Gly Asn	Lys Leu Phe Leu Thr
	690	695
Asp Ser Leu Ser Asp	Phe Thr Ser Ser Leu	Arg Thr Leu Leu Leu Ser
	705	710
His Asn Arg Ile Ser	His Leu Pro Ser Gly	Phe Leu Ser Glu Val Ser
	725	730
Ser Leu Lys His Leu	Asp Leu Ser Ser Asn	Leu Leu Lys Thr Ile Asn
	740	745
Lys Ser Ala Leu Glu	Thr Lys Thr Thr Lys	Leu Ser Met Leu Glu
	755	760
Leu His Gly Asn Pro	Phe Glu Cys Thr Cys	Asp Ile Gly Asp Phe Arg
	770	775
Arg Trp Met Asp Glu	His Leu Asn Val Lys	Ile Pro Arg Leu Val Asp
	785	790
Val Ile Cys Ala Ser	Pro Gly Asp Gln Arg	Gly Lys Ser Ile Val Ser
	805	810
Leu Glu Leu Thr Thr	Cys Val Ser Asp Val	Thr Ala Val Ile Leu Phe
	820	825
Phe Phe Thr Phe Phe	Ile Thr Thr Met Val	Met Leu Ala Ala Leu Ala
	835	840
		845

His	His	Leu	Phe	Tyr	Trp	Asp	Val	Trp	Phe	Ile	Tyr	Asn	Val	Cys	Leu
850						855					860				
Ala	Lys	Val	Lys	Gly	Tyr	Arg	Ser	Leu	Ser	Thr	Ser	Gln	Thr	Phe	Tyr
865					870					875					880
Asp	Ala	Tyr	Ile	Ser	Tyr	Asp	Thr	Lys	Asp	Ala	Ser	Val	Thr	Asp	Trp
				885					890					895	
Val	Ile	Asn	Glu	Leu	Arg	Tyr	His	Leu	Glu	Glu	Ser	Arg	Asp	Lys	Asn
		900						905					910		
Val	Leu	Leu	Cys	Leu	Glu	Glu	Arg	Asp	Trp	Asp	Pro	Gly	Leu	Ala	Ile
		915					920					925			
Ile	Asp	Asn	Leu	Met	Gln	Ser	Ile	Asn	Gln	Ser	Lys	Lys	Thr	Val	Phe
930					935						940				
Val	Leu	Thr	Lys	Lys	Tyr	Ala	Lys	Ser	Trp	Asn	Phe	Lys	Thr	Ala	Phe
945					950					955					960
Tyr	Leu	Ala	Leu	Gln	Arg	Leu	Met	Asp	Glu	Asn	Met	Asp	Val	Ile	Ile
				965					970					975	
Phe	Ile	Leu	Leu	Glu	Pro	Val	Leu	Gln	His	Ser	Gln	Tyr	Leu	Arg	Leu
		980					985						990		
Arg	Gln	Arg	Ile	Cys	Lys	Ser	Ser	Ile	Leu	Gln	Trp	Pro	Asp	Asn	Pro
	995					1000						1005			
Lys	Ala	Glu	Gly	Leu	Phe	Trp	Gln	Thr	Leu	Arg	Asn	Val	Val	Leu	Thr
1010					1015						1020				
Glu	Asn	Asp	Ser	Arg	Tyr	Asn	Asn	Met	Tyr	Val	Asp	Ser	Ile	Lys	Gln
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Tyr															

<210> 185
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 <212> PRT
 <213> Homo sapiens

<400> 185															
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Thr	Lys	Lys													

<210> 186
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 <212> PRT
 <213> Homo sapiens

<400> 186															
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		20						25					30		
Ser	Tyr	Pro	Cys	Asp	Glu	Lys	Lys	Gln	Asn	Asp	Ser	Val	Ile	Ala	Glu
		35					40					45			
Cys	Ser	Asn	Arg	Arg	Leu	Gln	Glu	Val	Pro	Gln	Thr	Val	Gly	Lys	Tyr
	50					55					60				
Val	Thr	Glu	Leu	Asp	Leu	Ser	Asp	Asn	Phe	Ile	Thr	His	Ile	Thr	Asn
65					70					75					80
Glu	Ser	Phe	Gln	Gly	Leu	Gln	Asn	Leu	Thr	Lys	Ile	Asn	Leu	Asn	His
				85				90					95		
Asn	Pro	Asn	Val	Gln	His	Gln	Asn	Gly	Asn	Pro	Gly	Ile	Gln	Ser	Asn
			100				105						110		
Gly	Leu	Asn	Ile	Thr	Asp	Gly	Ala	Phe	Leu	Asn	Leu	Lys	Asn	Leu	Arg

His	Asn	Asn	Ile	Tyr	Thr	Leu	Thr	Asp	Lys	Tyr	Asn	Leu	Glu	Ser	Lys	
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Ser	Leu	Val	Glu	Leu	Val	Phe	Ser	Gly	Asn	Arg	Leu	Asp	Ile	Leu	Trp	
	610					615					620					
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Leu	Thr	Arg	Leu	Asp	Leu	Ser	Leu	Asn	Arg	Leu	Lys	His	Ile	Pro	Asn	
				645					650					655		
Glu	Ala	Phe	Leu	Asn	Leu	Pro	Ala	Ser	Leu	Thr	Glu	Leu	His	Ile	Asn	
			660					665					670			
Asp	Asn	Met	Leu	Lys	Phe	Phe	Asn	Trp	Thr	Leu	Leu	Gln	Gln	Phe	Pro	
	675						680					685				
Arg	Leu	Glu	Leu	Leu	Asp	Leu	Arg	Gly	Asn	Lys	Leu	Leu	Phe	Leu	Thr	
	690					695					700					
Asp	Ser	Leu	Ser	Asp	Phe	Thr	Ser	Ser	Leu	Arg	Thr	Leu	Leu	Leu	Ser	
705					710					715					720	
His	Asn	Arg	Ile	Ser	His	Leu	Pro	Ser	Gly	Phe	Leu	Ser	Glu	Val	Ser	
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Ser	Leu	Lys	His	Leu	Asp	Leu	Ser	Ser	Asn	Leu	Leu	Lys	Thr	Ile	Asn	
		740						745					750			
Lys	Ser	Ala	Leu	Glu	Thr	Lys	Thr	Thr	Thr	Lys	Leu	Ser	Met	Leu	Glu	
		755						760					765			
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	770					775					780					
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785					790					795					800	
Val	Ile	Cys	Ala	Ser	Pro	Gly	Asp	Gln	Arg	Gly	Lys	Ser	Ile	Val	Ser	
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Leu	Glu	Leu	Thr	Thr	Cys	Val	Ser	Asp	Val	Thr	Ala	Val	Ile	Leu	Phe	
			820					825					830			
Phe	Phe	Thr	Phe	Phe	Ile	Thr	Thr	Met	Val	Met	Leu	Ala	Ala	Leu	Ala	
		835						840				845				
His	His	Leu	Phe	Tyr	Trp	Asp	Val	Trp	Phe	Ile	Tyr	Asn	Val	Cys	Leu	
	850					855					860					
Ala	Lys	Val	Lys	Gly	Tyr	Arg	Ser	Leu	Ser	Thr	Ser	Gln	Thr	Phe	Tyr	
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Asp	Ala	Tyr	Ile	Ser	Tyr	Asp	Thr	Lys	Asp	Ala	Ser	Val	Thr	Asp	Trp	
				885					890					895		
Val	Ile	Asn	Glu	Leu	Arg	Tyr	His	Leu	Glu	Glu	Ser	Arg	Asp	Lys	Asn	
			900					905					910			
Val	Leu	Leu	Cys	Leu	Glu	Glu	Arg	Asp	Trp	Asp	Pro	Gly	Leu	Ala	Ile	
		915						920				925				
Ile	Asp	Asn	Leu	Met	Gln	Ser	Ile	Asn	Gln	Ser	Lys	Lys	Thr	Val	Phe	
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Val	Leu	Thr	Lys	Lys	Tyr	Ala	Lys	Ser	Trp	Asn	Phe	Lys	Thr	Ala	Phe	
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Tyr	Leu	Ala	Leu	Gln	Arg	Leu	Met	Asp	Glu	Asn	Met	Asp	Val	Ile	Ile	
				965					970					975		
Phe	Ile	Leu	Leu	Glu	Pro	Val	Leu	Gln	His	Ser	Gln	Tyr	Leu	Arg	Leu	
			980					985					990			
Arg	Gln	Arg	Ile	Cys	Lys	Ser	Ser	Ile	Leu	Gln	Trp	Pro	Asp	Asn	Pro	
		995					1000					1005				
Lys	Ala	Glu	Gly	Leu	Phe	Trp	Gln	Thr	Leu	Arg	Asn	Val	Val	Leu	Thr	
	1010					1015					1020					
Glu	Asn	Asp	Ser	Arg	Tyr	Asn	Asn	Met	Tyr	Val	Asp	Ser	Ile	Lys	Gln	
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Tyr																

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 <211> 1059
 <212> PRT
 <213> Homo sapiens

<400> 187
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 35 40 45
 Ser Arg Ser Tyr Pro Cys Asp Glu Lys Lys Gln Asn Asp Ser Val Ile
 50 55 60
 Ala Glu Cys Ser Asn Arg Arg Leu Gln Glu Val Pro Gln Thr Val Gly
 65 70 75 80
 Lys Tyr Val Thr Glu Leu Asp Leu Ser Asp Asn Phe Ile Thr His Ile
 85 90 95
 Thr Asn Glu Ser Phe Gln Gly Leu Gln Asn Leu Thr Lys Ile Asn Leu
 100 105 110
 Asn His Asn Pro Asn Val Gln His Gln Asn Gly Asn Pro Gly Ile Gln
 115 120 125
 Ser Asn Gly Leu Asn Ile Thr Asp Gly Ala Phe Leu Asn Leu Lys Asn
 130 135 140
 Leu Arg Glu Leu Leu Leu Glu Asp Asn Gln Leu Pro Gln Ile Pro Ser
 145 150 155 160
 Gly Leu Pro Glu Ser Leu Thr Glu Leu Ser Leu Ile Gln Asn Asn Ile
 165 170 175
 Tyr Asn Ile Thr Lys Glu Gly Ile Ser Arg Leu Ile Asn Leu Lys Asn
 180 185 190
 Leu Tyr Leu Ala Trp Asn Cys Tyr Phe Asn Lys Val Cys Glu Lys Thr
 195 200 205
 Asn Ile Glu Asp Gly Val Phe Glu Thr Leu Thr Asn Leu Glu Leu Leu
 210 215 220
 Ser Leu Ser Phe Asn Ser Leu Ser His Val Ser Pro Lys Leu Pro Ser
 225 230 235 240
 Ser Leu Arg Lys Leu Phe Leu Ser Asn Thr Gln Ile Lys Tyr Ile Ser
 245 250 255
 Glu Glu Asp Phe Lys Gly Leu Ile Asn Leu Thr Leu Leu Asp Leu Ser
 260 265 270
 Gly Asn Cys Pro Arg Cys Phe Asn Ala Pro Phe Pro Cys Val Pro Cys
 275 280 285
 Asp Gly Gly Ala Ser Ile Asn Ile Asp Arg Phe Ala Phe Gln Asn Leu
 290 295 300
 Thr Gln Leu Arg Tyr Leu Asn Leu Ser Ser Thr Ser Leu Arg Lys Ile
 305 310 315 320
 Asn Ala Ala Trp Phe Lys Asn Met Pro His Leu Lys Val Leu Asp Leu
 325 330 335
 Glu Phe Asn Tyr Leu Val Gly Glu Ile Ala Ser Gly Ala Phe Leu Thr
 340 345 350
 Met Leu Pro Arg Leu Glu Ile Leu Asp Leu Ser Phe Asn Tyr Ile Lys
 355 360 365
 Gly Ser Tyr Pro Gln His Ile Asn Ile Ser Arg Asn Phe Ser Lys Pro
 370 375 380
 Leu Ser Leu Arg Ala Leu His Leu Arg Gly Tyr Val Phe Gln Glu Leu
 385 390 395 400
 Arg Glu Asp Asp Phe Gln Pro Leu Met Gln Leu Pro Asn Leu Ser Thr
 405 410 415
 Ile Asn Leu Gly Ile Asn Phe Ile Lys Gln Ile Asp Phe Lys Leu Phe

Phe Tyr Asp Ala Tyr Ile Ser Tyr Asp Thr Lys Asp Ala Ser Val Thr
 900 905 910
 Asp Trp Val Ile Asn Glu Leu Arg Tyr His Leu Glu Glu Ser Arg Asp
 915 920 925
 Lys Asn Val Leu Leu Cys Leu Glu Glu Arg Asp Trp Asp Pro Gly Leu
 930 935 940
 Ala Ile Ile Asp Asn Leu Met Gln Ser Ile Asn Gln Ser Lys Lys Thr
 945 950 955 960
 Val Phe Val Leu Thr Lys Lys Tyr Ala Lys Ser Trp Asn Phe Lys Thr
 965 970 975
 Ala Phe Tyr Leu Ala Leu Gln Arg Leu Met Asp Glu Asn Met Asp Val
 980 985 990
 Ile Ile Phe Ile Leu Leu Glu Pro Val Leu Gln His Ser Gln Tyr Leu
 995 1000 1005
 Arg Leu Arg Gln Arg Ile Cys Lys Ser Ser Ile Leu Gln Trp Pro Asp
 1010 1015 1020
 Asn Pro Lys Ala Glu Gly Leu Phe Trp Gln Thr Leu Arg Asn Val Val
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 1045 1050 1055
 Lys Gln Tyr

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24

<210> 189
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 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide

<400> 189
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22

<210> 190
 <211> 3220
 <212> DNA
 <213> Mus musculus

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 <222> (0)...(0)
 <223> Murine TLR8 cDNA

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 cagtgccatc ttccataaag cgaactattc cagaagctat ccttgtgacg agataaggca 180

caactccctt	gtgattgcag	aatgcaacca	tcgtcaactg	catgaagttc	cccaaactat	240
aggcaagtat	gtgacaaaca	tagacttgtc	agacaatgcc	attacacata	taacgaaaga	300
gtcctttcaa	aagctgcaaa	acctcactaa	aatcgatctg	aaccacaatg	ccaaacaaca	360
gcacccaaat	gaaaataaaa	atggtatgaa	tattacagaa	ggggcacttc	tcagcctaag	420
aaatctaaca	gttttactgc	tggaagacaa	ccagttatat	actataacctg	ctgggttgcc	480
tgagtctttg	aaagaactta	gcctaattca	aaacaatata	tttcaggtaa	ctaaaaacaa	540
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<210> 191
 <211> 3096
 <212> DNA
 <213> Mus musculus

<220>
 <221> misc_feature

<222> (0)...(0)

<223> Murine TLR8 ORF

<400> 191

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<210> 192

<211> 1032

<212> PRT

<213> Mus musculus

<400> 192

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Ser	Tyr	Pro	Cys	Asp	Glu	Ile	Arg	His	Asn	Ser	Leu	Val	Ile	Ala	Glu	
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Val	Thr	Asn	Ile	Asp	Leu	Ser	Asp	Asn	Ala	Ile	Thr	His	Ile	Thr	Lys	
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				85					90					95		
Asn	Ala	Lys	Gln	Gln	His	Pro	Asn	Glu	Asn	Lys	Asn	Gly	Met	Asn	Ile	
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Thr	Glu	Gly	Ala	Leu	Leu	Ser	Leu	Arg	Asn	Leu	Thr	Val	Leu	Leu	Leu	
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	130					135					140					
Lys	Glu	Leu	Ser	Leu	Ile	Gln	Asn	Asn	Ile	Phe	Gln	Val	Thr	Lys	Asn	
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Cys	Tyr	Phe	Lys	Cys	Asn	Gln	Thr	Phe	Lys	Val	Glu	Asp	Gly	Ala	Phe	
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Phe	Tyr	Val	Pro	Pro	Lys	Leu	Pro	Ser	Ser	Leu	Arg	Lys	Leu	Phe	Leu	
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Ser	Asn	Ala	Lys	Ile	Met	Asn	Ile	Thr	Gln	Glu	Asp	Phe	Lys	Gly	Leu	
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Glu	Asn	Leu	Thr	Leu	Leu	Asp	Leu	Ser	Gly	Asn	Cys	Pro	Arg	Cys	Tyr	
			245						250					255		
Asn	Ala	Pro	Phe	Pro	Cys	Thr	Pro	Cys	Lys	Glu	Asn	Ser	Ser	Ile	His	
		260						265					270			
Ile	His	Pro	Leu	Ala	Phe	Gln	Ser	Leu	Thr	Gln	Leu	Leu	Tyr	Leu	Asn	
	275						280					285				
Leu	Ser	Ser	Thr	Ser	Leu	Arg	Thr	Ile	Pro	Ser	Thr	Trp	Phe	Glu	Asn	
	290					295					300					
Leu	Ser	Asn	Leu	Lys	Glu	Leu	His	Leu	Glu	Phe	Asn	Tyr	Leu	Val	Gln	
305					310					315					320	
Glu	Ile	Ala	Ser	Gly	Ala	Phe	Leu	Thr	Lys	Leu	Pro	Ser	Leu	Gln	Ile	
			325						330					335		
Leu	Asp	Leu	Ser	Phe	Asn	Phe	Gln	Tyr	Lys	Glu	Tyr	Leu	Gln	Phe	Ile	
		340						345					350			
Asn	Ile	Ser	Ser	Asn	Phe	Ser	Lys	Leu	Arg	Ser	Leu	Lys	Lys	Leu	His	
	355						360					365				
Leu	Arg	Gly	Tyr	Val	Phe	Arg	Glu	Leu	Lys	Lys	Lys	His	Phe	Glu	His	
	370					375					380					
Leu	Gln	Ser	Leu	Pro	Asn	Leu	Ala	Thr	Ile	Asn	Leu	Gly	Ile	Asn	Phe	
385					390					395					400	
Ile	Glu	Lys	Ile	Asp	Phe	Lys	Ala	Phe	Gln	Asn	Phe	Ser	Lys	Leu	Asp	
			405						410				415			
Val	Ile	Tyr	Leu	Ser	Gly	Asn	Arg	Ile	Ala	Ser	Val	Leu	Asp	Gly	Thr	
			420					425					430			
Asp	Tyr	Ser	Ser	Trp	Arg	Asn	Arg	Leu	Arg	Lys	Pro	Leu	Ser	Thr	Asp	

Trp	Asp	Pro	Gly	Leu	Pro	Ile	Ile	Asp	Asn	Leu	Met	Gln	Ser	Ile	Asn
		915					920					925			
Gln	Ser	Lys	Lys	Thr	Ile	Phe	Val	Leu	Thr	Lys	Lys	Tyr	Ala	Lys	Ser
		930				935					940				
Trp	Asn	Phe	Lys	Thr	Ala	Phe	Tyr	Leu	Ala	Leu	Gln	Arg	Leu	Met	Asp
945					950					955					960
Glu	Asn	Met	Asp	Val	Ile	Ile	Phe	Ile	Leu	Leu	Glu	Pro	Val	Leu	Gln
				965					970					975	
Tyr	Ser	Gln	Tyr	Leu	Arg	Leu	Arg	Gln	Arg	Ile	Cys	Lys	Ser	Ser	Ile
			980					985					990		
Leu	Gln	Trp	Pro	Asn	Asn	Pro	Lys	Ala	Glu	Asn	Leu	Phe	Trp	Gln	Ser
		995					1000					1005			
Leu	Lys	Asn	Val	Val	Leu	Thr	Glu	Asn	Asp	Ser	Arg	Tyr	Asp	Asp	Leu
	1010					1015					1020				
Tyr	Ile	Asp	Ser	Ile	Arg	Gln	Tyr								
1025					1030										

<210> 193
 <211> 185
 <212> PRT
 <213> Mus musculus

Asn	His	Phe	Ser	His	Leu	Pro	Ser	Gly	Phe	Leu	Ser	Glu	Ala	Arg	Asn
1				5					10					15	
Leu	Val	His	Leu	Asp	Leu	Ser	Phe	Asn	Thr	Ile	Lys	Met	Ile	Asn	Lys
			20					25					30		
Ser	Ser	Leu	Gln	Thr	Lys	Met	Lys	Thr	Asn	Leu	Ser	Ile	Leu	Glu	Leu
		35					40					45			
His	Gly	Asn	Tyr	Phe	Asp	Cys	Thr	Cys	Asp	Ile	Ser	Asp	Phe	Arg	Ser
	50					55					60				
Trp	Leu	Asp	Glu	Asn	Leu	Asn	Ile	Thr	Ile	Pro	Lys	Leu	Val	Asn	Val
65				70						75					80
Ile	Cys	Ser	Asn	Pro	Gly	Asp	Gln	Lys	Ser	Lys	Ser	Ile	Met	Ser	Leu
			85						90					95	
Asp	Leu	Thr	Thr	Cys	Val	Ser	Asp	Thr	Thr	Ala	Ala	Val	Leu	Phe	Phe
			100					105					110		
Leu	Thr	Phe	Leu	Thr	Thr	Ser	Met	Val	Met	Leu	Ala	Ala	Leu	Val	His
		115					120					125			
His	Leu	Phe	Tyr	Trp	Asp	Val	Trp	Phe	Ile	Tyr	His	Met	Cys	Ser	Ala
	130					135					140				
Lys	Leu	Lys	Gly	Tyr	Arg	Thr	Ser	Ser	Thr	Ser	Gln	Thr	Phe	Tyr	Asp
145				150						155					160
Ala	Tyr	Ile	Ser	Tyr	Asp	Thr	Lys	Asp	Ala	Ser	Val	Thr	Asp	Trp	Val
			165						170					175	
Ile	Asn	Glu	Leu	Arg	Tyr	His	Leu	Glu							
		180						185							

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<220>
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<400> 194
 atagaattca ataatggggtt tctgccgcag cgccct

<210> 195
 <211> 29
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic oligonucleotide

<400> 195
 atatctagat ccaggcagag gcgcaggtc

29

<210> 196
 <211> 16
 <212> PRT
 <213> Unknown

<220>
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 <222> (4) ... (5)
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<220>
 <221> UNSURE
 <222> (7) ... (12)
 <223>

<220>
 <221> UNSURE
 <222> (14) ... (15)
 <223>

<400> 196
 Gly Asn Cys Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Cys
 1 5 10 15

<210> 197
 <211> 16
 <212> PRT
 <213> Homo sapiens

<400> 197
 Gly Asn Cys Arg Arg Cys Asp His Ala Pro Asn Pro Cys Met Glu Cys
 1 5 10 15

<210> 198
 <211> 16
 <212> PRT
 <213> Mus musculus

<400> 198
 Gly Asn Cys Arg Arg Cys Asp His Ala Pro Asn Pro Cys Met Ile Cys
 1 5 10 15

<210> 199
 <211> 16
 <212> PRT
 <213> Homo sapiens

<400> 199

Gly	Asn	Cys	Pro	Arg	Cys	Tyr	Asn	Ala	Pro	Phe	Pro	Cys	Ala	Pro	Cys
1				5					10					15	

<210> 200
 <211> 16
 <212> PRT
 <213> Mus musculus

<400> 200

Gly	Asn	Cys	Pro	Arg	Cys	Tyr	Asn	Val	Pro	Tyr	Pro	Cys	Thr	Pro	Cys
1				5					10					15	

<210> 201
 <211> 16
 <212> PRT
 <213> Homo sapiens

<400> 201

Gly	Asn	Cys	Pro	Arg	Cys	Phe	Asn	Ala	Pro	Phe	Pro	Cys	Val	Pro	Cys
1				5					10					15	

<210> 202
 <211> 16
 <212> PRT
 <213> Mus musculus

<400> 202

Gly	Asn	Cys	Pro	Arg	Cys	Tyr	Asn	Ala	Pro	Phe	Pro	Cys	Thr	Pro	Cys
1				5					10					15	

<210> 203
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
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 <222> (2)...(8)
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 <222> (14)...(22)
 <223>

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 <222> (25)...(30)
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<400> 203
 Arg Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg Xaa Asp Xaa Leu Xaa Xaa Xaa
 1 5 10 15
 Xaa Xaa Xaa Xaa Xaa Xaa Lys Leu Xaa Xaa Xaa Xaa Xaa Ser
 20 25 30

<210> 204
 <211> 31
 <212> PRT
 <213> Mus musculus

<220>
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 <222> (14)...(22)
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 <222> (25)...(30)
 <223>

<400> 204
 Arg Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg Xaa Asp Xaa Leu Xaa Xaa Xaa
 1 5 10 15
 Xaa Xaa Xaa Xaa Xaa Xaa Ser Leu Xaa Xaa Xaa Xaa Xaa Ser
 20 25 30

<210> 205
 <211> 31
 <212> PRT
 <213> Homo sapiens

<220>
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<400> 205
 Lys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg Xaa Asp Xaa Asp Xaa Xaa Xaa
 1 5 10 15
 Xaa Xaa Xaa Xaa Xaa Xaa Asp Leu Xaa Xaa Xaa Xaa Xaa Tyr
 20 25 30

<210> 206
 <211> 31
 <212> PRT
 <213> Mus musculus

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 <222> (14)...(22)
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 <222> (25)...(30)
 <223>

<400> 206
 Lys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg Xaa Asp Xaa Asp Xaa Xaa Xaa
 1 5 10 15
 Xaa Xaa Xaa Xaa Xaa Xaa Asp Leu Xaa Xaa Xaa Xaa Xaa His
 20 25 30

<210> 207
 <211> 20
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 <220>
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 <222> (8)...(8)
 <223> m5c
 <400> 207
 tccatgacgt tcctgatgct 20
 <210> 208
 <211> 25
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Synthetic oligonucleotide
 <400> 208
 ctctccacc agacctctg attcc 25
 <210> 209
 <211> 27
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Synthetic oligonucleotide
 <400> 209
 caaggcatgt cctaggtggt gacattc 27
 <210> 210
 <211> 31
 <212> PRT
 <213> Homo sapiens
 <400> 210
 Gln Val Leu Asp Leu Ser Arg Asn Lys Leu Asp Leu Tyr His Glu His
 1 5 10 15
 Ser Phe Thr Glu Leu Pro Arg Leu Glu Ala Leu Asp Leu Ser Tyr
 20 25 30
 <210> 211
 <211> 31
 <212> PRT
 <213> Mus musculus
 <400> 211
 Gln Val Leu Asp Leu Ser His Asn Lys Leu Asp Leu Tyr His Trp Lys
 1 5 10 15
 Ser Phe Ser Glu Leu Pro Gln Leu Gln Ala Leu Asp Leu Ser Tyr
 20 25 30
 <210> 212
 <211> 31

<212> PRT
<213> Homo sapiens

<400> 212
Arg Tyr Leu Asp Phe Ser Asn Asn Arg Leu Asp Leu Leu His Ser Thr
1 5 10 15
Ala Phe Glu Glu Leu His Lys Leu Glu Val Leu Asp Ile Ser Ser
20 25 30

<210> 213
<211> 31
<212> PRT
<213> Mus musculus

<400> 213
Arg Tyr Leu Asp Phe Ser Asn Asn Arg Leu Asp Leu Leu Tyr Ser Thr
1 5 10 15
Ala Phe Glu Glu Leu Gln Ser Leu Glu Val Leu Asp Leu Ser Ser
20 25 30

<210> 214
<211> 31
<212> PRT
<213> Homo sapiens

<400> 214
Lys Tyr Leu Asp Leu Thr Asn Asn Arg Leu Asp Phe Asp Asn Ala Ser
1 5 10 15
Ala Leu Thr Glu Leu Ser Asp Leu Glu Val Leu Asp Leu Ser Tyr
20 25 30

<210> 215
<211> 31
<212> PRT
<213> Mus musculus

<400> 215
Lys Tyr Leu Asp Leu Thr Asn Asn Arg Leu Asp Phe Asp Asp Asn Asn
1 5 10 15
Ala Phe Ser Asp Leu His Asp Leu Glu Val Leu Asp Leu Ser His
20 25 30

<210> 216
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<400> 216
tatggatcct cttgtgacaa aactcacaca tgc

33

<210> 217
<211> 33
<212> DNA
<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide

<400> 217
ataaagcttt catttaccg gagacagga gag 33

<210> 218
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<400> 218
tatgaattcc caccatgggt ttctgccga g 31

<210> 219
<211> 59
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<400> 219
ataggatccc cggggcacca ggccgccgc gcggccgcg gagagggcct catccaggc 59

<210> 220
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic oligopeptide

<400> 220
Asp Glu Ala Leu Ser Gly Gly Arg Gly Gly Gly Leu Val Pro Arg Gly
1 5 10 15
Ser

<210> 221
<211> 35
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<400> 221
tatatgcggc cgccaccat ggttctccgt cgaag 35

<210> 222
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<p><400> 222 tatatgcggc cgccagagag gacctcatcc aggc</p>	34
<p><210> 223 <211> 41 <212> DNA <213> Artificial Sequence</p>	
<p><220> <223> Synthetic oligonucleotide</p>	
<p><400> 223 tatatgcggc cgcccacccat ggtgttttcg atgtggacac g</p>	41
<p><210> 224 <211> 38 <212> DNA <213> Artificial Sequence</p>	
<p><220> <223> Synthetic oligonucleotide</p>	
<p><400> 224 tatatgcggc cgccatctaa ctcacacgta tacagatc</p>	38
<p><210> 225 <211> 42 <212> DNA <213> Artificial Sequence</p>	
<p><220> <223> Synthetic oligonucleotide</p>	
<p><400> 225 tatatgcggc cgcccacccat ggtgtttcca atgtggacac tg</p>	42
<p><210> 226 <211> 38 <212> DNA <213> Artificial Sequence</p>	
<p><220> <223> Synthetic oligonucleotide</p>	
<p><400> 226 tatatgcggc cgccatctaa ctcacaggtg tacagatc</p>	38
<p><210> 227 <211> 39 <212> DNA <213> Artificial Sequence</p>	
<p><220> <223> Synthetic oligonucleotide</p>	
<p><400> 227 tatatgcggc cgcccacccat ggaaaacatg cccctcag</p>	39

<210> 228
 <211> 38
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide

 <400> 228
 tatatgcggc cgccatccga tacacaagtc gtgagatc 38

 <210> 229
 <211> 41
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide

 <400> 229
 tatatgcggc cgcccacccat ggaaaacatg ttccttcagt c 41

 <210> 230
 <211> 38
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide

 <400> 230
 tatatgcggc cgccatctga aacacaagtt gttagctc 38